

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Robert KRUPCZAK	CONFIRMATION NO.: 7921
SERIAL NO.: 10/055,426	EXAMINER: Serrao, Ranodhi N.
FILING DATE: January 23, 2002	ART UNIT: 2141
FOR: METHOD AND APPARATUS FOR DISTRIBUTED SYSTEMS MANAGEMENT	

COMMENTS IN RESPONSE TO REASONS FOR ALLOWANCE

Mail Stop Issue Fee

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

A statement of reasons for allowance was attached to the Notice of Allowance mailed May 20, 2008, for the above-identified application.

Applicant appreciates the Notice of Allowance for all claims of the present application, but notes that each independent claim and each dependent claim is separately patentably distinguishable over the references relied upon by the Examiner, as such the references do not anticipate or render obvious the respective combinations of elements in each respective independent and dependent claim.

For example, the references relied upon by the Examiner do not disclose, teach, or suggest the computer-based method for communicating dependency data specifying dependency relationships between networked resources, according to claim 4, which includes:

- monitoring a first managed networked resource via a software agent executing on the first managed networked resource, wherein the software agent is managed by a software manager executing remotely from the first managed networked resource;

- collecting, by the software agent executing on the first managed networked resource, configuration data describing the first managed networked resource;

- extracting, by the software agent executing on the first managed networked resource, dependency data from the configuration data, the dependency data specifying either provider or consumer dependency relationships between the first managed networked resource and one or more other managed networked resources, wherein said provider dependency relationship indicates that a first problem at the first managed networked resource will propagate to the one or more other managed networked resources, and said consumer dependency relationship indicates that a second

problem at the one or more other managed networked resources will propagate to the first managed networked resource;

generating, at the first managed networked resource, a table that includes the extracted dependency data, wherein the table is stored separate from other configuration data associated with the first managed networked resource that has been collected by the software agent;

offering access to the extracted dependency data in the table generated at the first managed networked resource, the access being offered via a dependency interface of the software agent executing on the first managed networked resource, the dependency interface being an interface for a distributed systems management protocol; and

communicating the dependency data from the software agent to the software manager

Nor do the references relied upon by the Examiner disclose, teach, or suggest a computer-based method for distributed systems management, according to claim 9, which includes:

monitoring a first managed network device with a first software agent executing on the first managed network device, wherein the software agent is managed by a software manager executing remotely from the first managed network device;

collecting, by the software agent executing on the first network device, configuration data describing the first managed network device;

gathering, by the first software agent executing on the first managed network device, dependency data describing either a provider or a consumer dependency relationship between the first managed network device and one or more other network devices, wherein said provider dependency relationship indicates that a first problem at the first managed network device will propagate to the one or more other network devices, and said consumer dependency relationship indicates that a second problem at the one or more other network devices will propagate to the first managed network device;

communicating, by the first software agent executing on the first managed network device, the dependency data gathered by the first software agent to the software manager;

processing, by the software manager, the gathered dependency data obtained from the first software agent to determine whether either the provider or the consumer dependency relationship exists between the first managed network device and a second network device; and

initiating, by the software manager, a second software agent if either the provider or the consumer dependency relationship exists between the first managed network device and the second network device, wherein the second software agent executes on and monitors the second network device.

Nor do the references relied upon by the Examiner disclose, teach, or suggest a computer-based method for collecting dependency data specifying dependency relationships between networked resources, according to claim 18, which includes:

monitoring a plurality of managed networked resources via a software agent executing on each of the managed networked resources, wherein the plurality of software agents are managed by a software manager executing remotely from the plurality of managed networked resources;

gathering, by the plurality of software agents executing on the plurality of managed networked resources, configuration data describing the plurality of networked resources;

extracting, by the plurality of software agents, dependency data from the gathered configuration data, the dependency data including data specifying either provider or consumer dependency relationships associated with the plurality of managed networked resources, wherein said provider dependency relationship indicates that a first problem at a first managed networked resource will propagate to a second networked resource, and said consumer dependency relationship indicates that a second problem at the second networked resource will propagate to the first managed networked resource;

communicating the dependency data extracted by the plurality of software agents from the plurality of software agents to the software manager;

adding at least a portion of the dependency data extracted by the plurality of software agents to a central repository managed by the software manager, wherein the portion of the dependency data added to the central repository is stored in the central repository separately from other configuration data;

processing, by the software manager, the extracted dependency data obtained from the plurality of software agents to determine whether either the provider or the consumer dependency relationships exist between at least one of the plurality of managed networked resources and one or more additional networked resources not included in the plurality of managed networked resources; and

initiating, by the software manager, management of the one or more additional networked resources not included in the plurality of managed networked resources if either the provider or the consumer dependency relationships exist between at least one of the plurality of managed networked resources and the one or more additional networked resources.

Nor do the references relied upon by the Examiner disclose, teach, or suggest an article comprising a machine-readable storage medium that stores executable instructions to communicate dependency data specifying dependency relationships between networked resources, according to claim 27, which includes the instructions causing a machine to:

monitor a first managed networked resource via a software agent executing on the first managed networked resource, wherein the software agent is managed by a software manager executing remotely from the first managed networked resource;

collect, by the software agent executing on the first managed networked resource, configuration data describing the first managed networked resource;

extract, by the software agent, dependency data from the configuration data, the dependency data specifying either provider or consumer dependency relationships between the first managed networked resource and the one or more other managed networked resources, wherein said provider dependency relationship indicates that a first problem at the first managed networked

resource will propagate to the one or more other managed networked resources, and said consumer dependency relationship indicates that a second problem at the one or more other managed networked resources will propagate to the first managed networked resource;

generate, at the first managed networked resource, a table that includes the extracted dependency data, wherein the table is stored separate from other configuration data associated with the first managed networked resource that has been collected by the software agent;

offer access to the extracted dependency data in the table generated at the first managed networked resource, the access being offered via a dependency interface of the software agent executing on the first managed networked resource, the dependency interface being an interface for a distributed systems management protocol; and

communicate the dependency data from the software agent to the software manager.

Nor do the references relied upon by the Examiner disclose, teach, or suggest an article comprising a machine-readable storage medium that stores executable instructions to manage distributed systems, according to claim 28, which includes the instructions causing a machine to:

monitor a first managed network device with a first software agent executing on the first managed network device, wherein the software agent is managed by a software manager executing remotely from the first managed network device;

collect, by the software agent executing on the first managed network device, configuration data describing the first managed network device;

gather, by the first software agent, dependency data describing either a provider or a consumer dependency relationship between the first managed network device and one or more other network devices, wherein said provider dependency relationship indicates that a first problem at the first managed network device will propagate to the one or more network devices, and said consumer dependency relationship indicates that a second problem at the one or more network devices will propagate to the first managed network device;

communicate, by the first software agent executing on the first managed network device, the dependency data gathered by the first software agent to the software manager;

process, by the software manager, the gathered dependency data obtained from the first software agent to determine whether either the provider or the consumer dependency relationship exists between the first managed network device and a second network device; and

initiate, by the software manager, a second software agent if either the provider or the consumer dependency relationship exists between the first managed network device and the second network device, wherein the second software agent executes on and monitors the second network device.

Further, with respect to the Examiner's comments regarding statutory subject matter, the Examiner's interpretation may be unnecessarily limiting. For example, with regard to the

method claims, the Examiner's interpretation of "managed network resources" is unnecessary as such an interpretation is not necessary for determining whether a method claim comprises statutory subject matter. In any event, the language of the claims must be interpreted in light of the specification and the embodiments of the invention described therein.

Furthermore, the Examiner's interpretation regarding "an article comprising a machine-readable storage medium" may likewise be unnecessarily limiting. This interpretation suggests that "a machine-readable storage medium" requires a computer memory executed by a processor. Applicant does not recite a processor in claims 27 and 28 nor should an Examiner interpret these claims as requiring a processor. Applicant is claiming a machine-readable storage medium recited as an article of manufacture. In some embodiments of the invention, this article of manufacture is directed toward, but not limited to, a computer memory or a computer storage media (e.g., computer optical or magnetic storage media) as would be appreciated by one of ordinary skill in the art. It is well settled that such articles of manufacture are directed toward statutory subject matter.

These comments, in response to the Examiner's reasons for indicating allowable subject matter, are timely submitted. Please charge any fees associated with the submission of this paper to Deposit Account Number 033975 (**Ref. No. 019287-0317331**). The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

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Respectfully submitted,

By: 

Rick A. Toering
Registration No. 43,195

PILLSBURY WINTHROP SHAW PITTMAN LLP
P.O. Box 10500
McLean, Virginia 22102
Main: 703-770-7900
Fax: 703-770-7901